

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A particle-dispersed complex, comprising a matrix ~~having carbon as a main component consisting of carbon black obtained by thermal chemical vapor deposition (CVD); and~~ metallic ruthenium particles dispersed in and surrounded by the matrix, wherein each of the particles has a particle diameter in a range of from 5 to 100 nm; and every part of the entire surface of each of the particles makes contact with either the matrix or another of the particles; ~~and~~ ~~the matrix is carbon black.~~

Claims 2-13 (Canceled)

Claim 14 (Previously Presented): The particle-dispersed complex according to Claim 1, wherein an atomic number ratio of carbon to ruthenium in the particle-dispersed complex is in a range of from 30:70 to 70:30.

Claim 15 (Currently Amended): The particle-dispersed complex according to Claim 1, wherein the matrix is deposited on a substrate by [[a]] CVD ~~method~~ at a substrate temperature of 350 to 450°C ~~using~~ with a source material comprising ruthenium dipivaloylmethanate and a carrier gas comprising greater than 9% and less than 23% of oxygen.

Claim 16 (Canceled)

Claim 17 (Currently Amended): The particle-dispersed complex according to Claim 1, wherein the complex is ~~held~~ on an electrically conductive substrate.

Claim 18 (Currently Amended): The particle-dispersed complex according to Claim 1, wherein the complex is ~~formed~~ on a solid electrolyte substrate.

Claim 19 (Previously Presented): The particle-dispersed complex according to Claim 18, wherein an interfacial electrical conductivity  $\sigma$  of the solid electrolyte substrate and a thin film formed from the particle-dispersed complex on a surface of the solid electrolyte substrate is in a range of from  $10^{-6} \text{ Sm}^{-1}$  to  $10^{-2} \text{ Sm}^{-1}$  at a temperature in a range of from 190 to 350°C.

Claim 20 (Previously Presented): The particle-dispersed complex according to Claim 19, wherein the solid electrolyte substrate is a zirconium oxide substrate which includes a stabilizing agent.

Claim 21 (Previously Presented): The particle-dispersed complex according to Claim 1, wherein the complex is a sensor electrode of a solid electrolyte sensor or an electrode for a solid electrolyte.

Claim 22 (Previously Presented): The particle-dispersed complex according to Claim 1, wherein the complex is an electrochemical catalyst.

Claim 23 (Previously Presented): The particle-dispersed complex according to Claim 21, wherein the complex is an electrochemical catalyst.

Claim 24 (Previously Presented): A solid electrolyte sensor, wherein the particle-dispersed complex according to Claim 1 is formed as an electrode on a surface of a zirconium oxide substrate which includes a stabilizing agent.